Chapter 5: Plan Development Considerations

5.1 Constructability Considerations

- 1. Earthwork balance through project (Are we constructing areas of fill before the areas of borrow where we will be getting the earth?)
- 2. Tie in/grade differences
- 3. Grade changes at -Y- lines
- 4. Utility issues
- 5. Temporary Shoring- needs, locations, quantities, etc.
- 6. Temporary pavement
- 7. Drainage/pipes, culverts- depth, installation, sags in Roadway, super-elevations, where will water go during construction?, etc.
- 8. Phasing of drainage: For instance, build ½ of road then other ½ of road, how will this affect the pipes installation/ drainage
- 9. Drainage slope, pipes, CB installation and conflicts with temp alignments
- 10. Stream relocations
- 11. Phasing clarity, safety, constructability
- 12. Stabilization as it relates to construction phasing and intersections
- 13. Undercut
- 14. Cross over wedging and drop offs
- 15. Width of temporary bridge to be used coordinate with Division; Reason: Temporary bridge may require a larger footprint (including sub-structure) than what has been provided. This can effect shoring requirements and locations.
- 16. Can you begin construction of bridge before closing the road?
- 17. Make sure everything that is supposed to be constructed is constructed.

5.2 Safety Considerations

- 1. For new location, which –Y– lines are being crossed?
- 2. Changes in traffic patterns/intersection changes
- 3. Crash data on project. Are there any roadway improvements needed?
- 4. Site distances for lane closures both vertical and horizontal
- 5. Advisory Speed Panels

5.3 Mobility Considerations

- What projects are surrounding the one you are working on?
- Pedestrian/Bike issues? Detours required?

5.4 Other Considerations

- 1. User cost (especially pertaining to contract times)
- 2. Time Restrictions, ICTs, etc.
- 3. Moratoriums (and how they affect TMP)
- 4. Environmental commitments
- 5. Environmental Documents
- 6. Overhead signs and are they included in TMP (even off project limits)
- 7. Signal installation (on and off project limits- loop installation on existing road even though project is new location, etc.)
- 8. Pavement design typical sections for final layer (1 $\frac{1}{2}$ " or 2" for asphalt)? Is diamond grinding specified for concrete pavement?

5.5 Coordination Considerations

- 1. ADA and pedestrian issues
- 2. Cooperation between contractors clause needed in contract?
- 3. Changes in cross sections or typical sections after 25% roadway plans?
- 4. Is coordination with Railroad necessary?
- 5. Is coordination with EMS or schools necessary?

5.6 Temporary Pavement Considerations

- 1. Conflicts at intersections in pavement marking plans
- 2. Design pavement marking for best traffic operations
- Crosswalks
- 4. Tie pavement markings to existing